

Please install R and RStudio on your laptops if you don't already have them (R 3.5 or later should be fine). Latest versions can be obtained from the following links:

<https://cran.ma.imperial.ac.uk/>

<https://rstudio.com/products/rstudio/download/> (free open source license)

We will be using a few additional packages from the R repository and Bioconductor. These can be installed by opening RStudio and copy/pasting the following commands in the bottom left panel where you see a > symbol. Paste a line at a time as it will take a few moments for the relevant files to be downloaded for each package. Hopefully the last message will say "package 'name' successfully unpacked and MD5 sums checked". When the command prompt > appears again, you can run the next line. Don't worry if you have any problems, just come along at 9.45 tomorrow morning and we'll help get you set up.

Commands to install additional packages:

```
install.packages("ggplot2")
```

```
install.packages("reshape2")
```

```
install.packages("gplots")
```

```
if (!requireNamespace("BiocManager", quietly = TRUE))
```

```
  install.packages("BiocManager")
```

```
BiocManager::install("edgeR")
```

```
BiocManager::install("goseq")
```